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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,471	10/15/2003	Lin Wang	006401.00417	8885

22908 7590 05/19/2008

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EXAMINER	
HUSON, MONICA ANNE	
ART UNIT	PAPER NUMBER
1791	
MAIL DATE	DELIVERY MODE
05/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,471	WANG ET AL.	
	Examiner	Art Unit	
	Monica A. Huson	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *040504*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Dingeman et al. (U.S. Patent 5,000,783).

Regarding Claim 1, Dingeman et al., hereafter "Dingeman," show that it is known to have an extruded starch product (Column 11, lines 27-39).

Regarding Claim 2, Dingeman shows the process as claimed as discussed in the rejection of Claim 1 above, including a product where the moisture content is below 15% (Column 11, lines 27-39).

Regarding Claim 3, Dingeman shows the process as claimed as discussed in the rejection of Claim 1 above, including a product where the moisture content is about 9% (Column 11, lines 27-39; it is being interpreted that Dingeman's "about 7%" meets the claimed "about 9%").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 33-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatsuka et al. (U.S. Patent 4,076,846), in view of Redding, Jr. (U.S. Patent 5,455,342), further in view of Altieri (U.S. Patent 5,849,233). Regarding Claim 1, Nakatsuka et al., hereafter "Nakatsuka," show that it is known to have an extruded starch product made by the process comprising providing a hydroxyalkyl starch, said starch being derivatized with a hydroxyalkyl substituent having from 2 to 6 carbon atoms (Column 6, lines 60-62), said starch being a granular starch (Column 5, lines 33-51; Column 8, line 41); and extruding said starch

in an extruder, said extruder having a barrel, a die, and at least one rotating shaft, said barrel having at least first and second zones, said first zone being upstream from said second zone, the conditions in the first zone being insufficient to gelatinize said starch to said gelatinization level and the conditions in said second zone being sufficient to gelatinize said starch to said gelatinization level, said starch being extruded in the presence of controlled moisture, said process including the step of controlling the rotational speed of said shaft to impart specific mechanical energy to said starch sufficient to result in a soluble extruded starch product that is capable of extrusion through said die at said rotational speed (Column 8, lines 9-17, 31-33, 49-53; Column 13, lines 31-40; Column 14, lines 5-12, 25-28; It is noted that gelatinization occurs about 150C-175C.). Nakatsuka does not specifically disclose the particle size of his common starch. Redding, Jr. shows that it is known to carry out a method of molding starches wherein the starches have a particle size distribution such that at least 90% by weight of the starch particles pass through an 80 mesh (180 micron) screen (Column 1, lines 19-23; It is being interpreted that since starch is "commonly found" at sizes from 5-25 microns, at least 90% by weight of starch would fall into the disclosed size of 5-25 microns.). Redding, Jr. and Nakatsuka are combinable because they are concerned with a similar technical field, namely, methods of molding starches. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to identify the size disclosed in Redding, Jr. as that of Nakatsuka's "common" starches in order to design molding processes that would accommodate specifically-sized granules. Nakatsuka does not specifically show barrel moisture levels. Altieri shows that it is known to carry out a method wherein the moisture in the barrel does not exceed 25% by weight of said starch (Column 1, lines 56-58). Altieri and Nakatsuka are combinable because they are concerned with a similar technical field, namely, methods of molding starches. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Altieri's specific barrel moisture teachings during Nakatsuka's molding process in order to most accurately form a product that accommodates exclusive end-use specifications.

Regarding Claim 2, Nakatsuka shows the product as claimed as discussed in the rejection of Claim 1 above, including a method comprising the step of drying said extruded starch product to a moisture content below about 15% to form a dried product (Column 14, lines 51-52), meeting applicant's claim.

Regarding Claim 3, Nakatsuka shows the product as claimed as discussed in the rejection of Claim 1 above, including a method method wherein said starch product is dried to a moisture content between about 9% and about 12% (Column 13, line 9), meeting applicant's claim.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Monica A Huson
Primary Examiner
Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791